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Biological & Medical Serials

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EDITED BY

A. K. HENRY, M.B., F.R.C.S.I.

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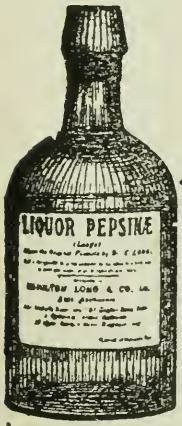

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EDITORIAL.

In March, 1920, the Dublin Journal of Medical Science became the organ of the Royal Academy of Medicine in Ireland.

At a General Meeting of that Academy on April 12th, 1922, it was decided that the name of the Journal should be changed to the Irish Journal of Medical Science, and that the name be printed in Irish and in English.* It is impossible without regret to do any customary thing, however trivial, for the last time, and the change in title of this old and famous Journal (though it has indeed been modified in the past) is not lightly made. But the Journal, with its proud associations, thus becomes in name what it has long been in fact, the mouthpiece of Irish medicine.

Graves and Stokes were its first co-editors, and they are associated wherever medical science is taught or is practised throughout the world, less with a School or a city than with the country which bore them. If we forget the towns which claimed the birth of Homer, we still remember that he was a Greek.

* A new block is being prepared for the cover and title-page in accordance with this decision.

THE
IRISH JOURNAL OF MEDICAL SCIENCE
FORMERLY
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THE OFFICIAL ORGAN OF THE ROYAL ACADEMY OF MEDICINE IN IRELAND

FIFTH SERIES. No. 1. MARCH, 1922

PRESENTATION TO THE ROYAL COLLEGE OF PHYSICIANS OF IRELAND OF BRONZE PLAQUE OF THE LATE JAMES LITTLE, M.D., EX-PRESIDENT, 17th JANUARY, 1922.

Mr. President, Mr. Provost, Ladies and Gentlemen,—I rise with mingled feelings to say a few words upon the occasion which has brought us here to-day—the date of which would have been much earlier but for circumstances beyond our control. On the one hand I have the duty, may I not say the chastened pleasure, of handing over to the care of the College the Memorial which now adorns its walls. On the other hand, a crowd of memories rises up when I think of the man with whom I was intimately associated for fifty years. Never can I forget his unvarying kindness and his fostering help to a young aspirant in his faltering footsteps upon the uncertain path of private practice. For, once your friend he remained ever your friend.

Dr. James Little was born and reared in Newry, and carried with him throughout life the impress of his Northern nationality. Soon after he was qualified he was placed for a time in charge of the Armagh County Infirmary, where he gained the friendship and high esteem of his seniors, Dr. Robinson of Armagh, and Dr. James Cuming, the then leading physician of Belfast. For three years he acted as surgeon in the service of the P. and O. Steam Packet Company, to and from India, and thus gained experience of the world which

proved valuable in later life. He spent two years in private practice in Lurgan, and then devoted a year to post-graduate study on the Continent, and when in full practice in Dublin he made himself familiar with the chief foreign spas and health resorts.

Spurred by ambition and attracted by the lure of Dublin, he forsook the limited sphere of country practice, and came up to town to try his fortune in the larger arena as an unknown man. Thanks in large measure to the influence of his firm friend, Dr. Alfred Hudson, Little was appointed Physician to the Adelaide Hospital, with which he was honourably connected for forty-six years, and where he laid the foundations of his after success. The wheel of life revolved slowly at first, and many years ago he told me that at the end of his first year in Dublin he felt his prospects so doubtful that he was uncertain whether to remain here or not. But by stubborn will, and above all by strenuous work—so often disregarded in these times—he carried the day. He preached and practised the gospel of work, and never claimed an eight-hour day. The guiding principle of his life was :

> "Whatsoever thy hand findeth to do, do it with thy might."

Step by step he mounted the ladder of success, until he became the foremost consultant of his day, and was appreciated in all quarters of Ireland.

He was an admirable and impressive clinical teacher and lecturer, and filled, in turn, two Chairs of the Practice of Medicine, first, in the Ledwich School of Medicine, Peter Street, and later in the Royal College of Surgeons.

Socially, he was equally delightful as host or guest, and his after-dinner speeches were always happy, never tiresome, and often illuminated by scintillations of sly humour, which put everyone in a genial mood. To use a biological phrase, he was keenly responsive to his environment, and his shrewd and ready wit piloted him safely through difficult situations.

In 1898 he capped his honours by being appointed Regius Professor of Physic in the University of Dublin, in succession to Sir John Banks, K.C.B. He occupied with distinction this dignified post for sixteen years. He was not desirous of

dignities. and upon more than one occasion declined to accept a titular honour.

His manifold activities were not limited to this country. for in 1897 he was appointed Crown Nominee for Ireland on the General Medical Council, and took a most active share in its proceedings. He was always listened to with attention and respect, and so popular was he with his comrades that at one time he was within a point or two of being elected President of the Council.

His energy and capacity for work were unfailing, and in addition to other weighty demands upon his time he took up in 1898, the onerous post of editor of the DUBLIN QUARTERLY JOURNAL OF MEDICAL SCIENCE, now known by the title of the DUBLIN JOURNAL OF MEDICAL SCIENCE, which is now the official organ of the Royal Academy of Medicine in Ireland.

He did not write any book of signal importance, and his life will survive in the memory of his contemporaries rather than in medical literature.

He was warmly attached to the Royal College of Physicians of Ireland, and received from it every possible token of honour or office. For two years he zealously and courteously filled the responsible and sometimes trying post of Registrar of the College. He reigned as President for two years, and steered its course with unfailing dignity, generous hospitality, and consummate tact.

Mindful of the precept that it is not good that man should be alone, he married at the age of 35, and had three children, who survive him, two sons and a daughter. During the course of a long, active and happy life, quitting himself as a man, and always keeping his heart young, he gained the esteem and affection of an immense circle of friends and patients, came to his "grave in a full age, like as a shock of corn cometh in in his season." His memory will ever be cherished by those who knew him : "his leaf also shall not wither."

This College has ever delighted to honour its faithful sons. In the Main Hall we are proud to have four of the finest works of art in the city, viz., the statues of Graves, Marsh, Corrigan, and Stokes. Three of them are by the chisel of Foley, and one by Bruce Joy, both of these artists being of Irish birth. On the walls hang numerous portraits, chiefly of Ex-Presidents,

going back to the latter half of the 17th century. Of these perhaps the most notable is that of Sir Dominic Corrigan, who presided over the College for the unprecedented term of five years, in compliment to his energy and liberality in rearing this building which stands on the site of the old Kildare Street Club, destroyed by fire.

The foundation-stone of this building was laid by H.E. The Earl of Carlisle. 7th July, 1862.

On the part of the Fellows, I now ask the College to accept and hold in honour the Memorial of an Ex-President, Dr. James Little, whose ways were ways of pleasantness and all his paths were peace.

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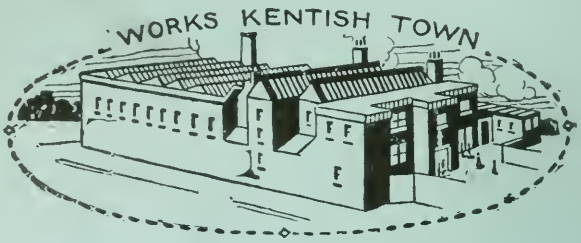

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ORGANISATION OF THE IRISH MEDICAL PROFESSION.*

By Thomas Hennessy.

Irish Medical Secretary of the British Medical Association; President of the Section of State Medicine, Royal Academy of Medicine in Ireland.

THE want of efficient organisation of the Irish medical profession is frequently deplored by many of its members. A well organised profession should be able to command satisfactory conditions of medical service for its members and to safeguard the public interests. Such a medical service would be bound to react very favourably on the quality of the medical services rendered to the people, and thus the public would owe a great deal to a well organised profession.

At the present moment, and at all times, the medical profession in Ireland, owing to many causes, is very indifferently organised and quite unequal to protect and to promote its most vital interests with results which, primarily unsatisfactory to itself, are none the less injurious to the people of the country, inasmuch as the Irish medical services, for their main purposes, are a full half-century behind the times. The causes for this very undesirable state of affairs are generally well known to the too limited number of the profession who have concerned themselves with medical politics. Their recognition, however, is of little value while there is, from any cause, hesitation in stating them publicly and bringing their unfortunate results face to face with those of the profession and the public who are mainly responsible. In dealing with this subject I shall take the risk of being as candid as I can, as I feel if I were to act otherwise, I should fail in my object, as well as waste the time of the Section of State Medicine. In the circumstances much of what I say will possibly, at the time and place, appear irrelevant, but I hope to show its bearing before I am finished.

* The Presidential Address to the Section of State Medicine, Royal Academy of Medicine in Ireland, January 13, 1922.

It is frequently stated that as much as 50% of the Irish profession have no direct interest in medical politics. This view has but little foundation. All sections of the profession, especially in Ireland, are interdependent, and each should therefore take an interest and do its part towards the well-being of the whole. There are, however, in Ireland and elsewhere, too many members of the medical profession who, (judging from their attitude,) do not admit this proposition and give little or no assistance to any organisation concerned with the promotion of the interests of their profession. There are, indeed, many with a very direct interest in medical politics who, whilst sharing the benefits won by the organisations, refuse to join them, and audaciously state, in opposition to facts, "they are no good."

In the circumstances I must try (1) to show if we are to be saved from the faults inherent in ourselves and from an unworthy individualism, that there is at the moment a very urgent necessity for the organisation of the Irish medical profession; and (2) that the existing medical organisations, even with their shortcomings, deserve better support from the profession than they receive.

It is mainly owing to the lack of effective organisation that the ratio of supply to demand still regulates generally the value of medical services. All the important skilled trades have, through their unions, taken the precaution, by limiting the number of apprentices in the different crafts, that the ratio of supply to demand will not, at least in times of normal employment, be out of due proportion, and thus such trades are safeguarded from the exploitation of more skilled hands than are required. In the medical profession there is no effective means of regulating the ratio that should exist between supply and demand, and the resulting excess of doctors over the requirements of our medical system are detrimental both to the profession and to the public.

One of Ireland's greatest industries is the manufacture of doctors. In support of this statement it is only necessary to mention that fully 80 per cent. of the doctors newly qualified in Ireland are for export. In the past such an excess of Irish doctors, over the openings for them in the Irish medical services and in Irish private practice, was not very serious,

as they found a scope for their professional activities in England and in the Dominions. This outlet, however, for the Irish plethora of medical men is fast coming to a close owing to the medical schools in those countries being now able to provide sufficient medical practitioners for their national requirements. It may be urged that the knowledge of this fact, which the medical schools do not proclaim, will remedy the trouble by limiting the number of medical students. It is doubtful if it will in Ireland. The traditional liking of the Irish for learning and the learned professions, and the determination to make a success, even in the commercial sense, of our Irish universities and their different schools, are factors in this respect that must be reckoned with. Perhaps with the main view of helping the universities, innumerable scholarships, exhibitions, and grants have been provided for those bodies with the result that a large proportion of the medical students of to-day are receiving their professional training at the public expense. Formerly the provision of scholarships, etc., was justified in the public interest, as they made opportunities for young people with limited or no means but possessed of intellectual capacities above the average, which when developed, might be expected to confer substantial benefits on mankind. Nowadays scholarships and such aids are for the most part founded as attractions to the different competing universities. Moreover, they are so numerous that they may be obtained and retained by any student with a half-way intellect and something more than average industry.

If the medical schools of the universities and the licensing bodies were so controlled by the General Medical Council—and it has the necessary powers—that they could not so hurriedly place their output of doctors in the market, they would do much better for the public by providing them with a more finished medical practitioner. The training of the present-day newly qualified doctors has the same main drawbacks that it had twenty years ago. They undertake practice with considerable theoretical knowledge and more experience of laboratory methods than heretofore. The number, however, who never set a fracture, reduced a dislocation, nor put on a midwifery forceps is as big as in the olden times. This appalling lack

of practical training is an injustice upon an unsuspecting public and, as many of us must have had reason to admit, calamitous in its consequences. To remedy matters in this respect provision should be made that no newly qualified doctor should be allowed to undertake independent general practice until he has done one year of post-graduate work following immediately after qualification. The curriculum for this year should be entirely practical, and consist of work generally and likely to be met with in every-day practice. Obstacles to the adoption of this course can be raised, but they should not be insurmountable where the lives of the public are at stake.

The addition of one year for practical work, whilst safeguarding the public, will, owing to the additional expense involved, lessen the number of doctors and help to regulate within proper limits the ratio of supply to demand and to rid us of the present unemployment question in the medical profession. Overcrowding in the profession, in present circumstances leads to an undesirable competition and interferes with professional independence. To keep the wolf from the door, behind which are sometimes his young helpless children, the hard-pressed doctor, in addition to other things, must humour and minister to the disordered imagination of his neurotic patients. If he dare to be candid—even sympathetically candid—he is almost sure to lose those patients, and occasionally their more normal relatives and the income derived from all of them. Such patients will find their way to another doctor in whom the moral professional sense—perhaps never very high—has become blunted owing to the stress of an undue competition. He panders to them, and somehow cannot resist being the more obsequious to them when he knows they have fallen foul of a colleague because he treated them as an honourable and conscientious doctor should. The patients, in their imagined sense of injury, make up their minds to be pleased with their latest doctor, and frequently become seized with an uncontrollable desire to become well, so that they might feel the ecstasy of circulating broadcast that their former doctor knew nothing about their ailments, and if they had not gone to a doctor who at least realised the commercial value of being "all things

to all people," they would be now reposing in their graves or urns.

It is owing to those conditions of medical practice that not a few able but conscientious doctors go under. The picture I have been drawing for you is not overcoloured. The importance of realising its existence, even if it only applies to a comparatively small proportion of the profession, is that the number in many areas is sufficiently large to make it very difficult for conscientious doctors to discharge honourably and efficiently their duties to their patients.

All I have said regarding those matters would be irrelevant if I did not believe that an efficient medical organisation would counteract them. A medical organisation that would, in the narrow sense, limit its activities to advance our material interests would fall far short of what it should be. To make it possible for the profession to practise their calling conscientiously and honourably, in their own and in the public interests, should be the first aim of a medical organisation that would hope to command the confidence and support of the profession as a whole. I shall, when outlining a medical organisation, make some suggestions with regard to a statutory body that would regulate the conduct of certain members of the profession who are at most times ready to degrade it in pursuit of their own sordid interests. This class, in a sense, is much more reprehensible than those who bring discredit on the profession through their being the helpless victims of inherent moral infirmities.

I have claimed that the existing medical organisations in Ireland deserve, on the merits, better support from the Irish medical profession. There are close on 1,000 medical practitioners engaged in the Irish Poor Law medical services. The medico-political activities of all Irish medical organisations have been in the past mainly concerned with the improvement of the status of Irish Poor Law medical officials. In addition to the Poor Law medical practitioners there are not more than 300 other Irish medical practitioners to whom the medical organisations could, in the limited sense, render any substantial benefits. The effective membership of any one of the two medical organisations in Ireland (Irish Medical Association and British Medical Association) in recent years

rarely exceeded 600. The two Associations taken together have a membership of about 800 out of some 2,400 doctors more or less engaged in medical practice in Ireland. That is more than two-thirds of the Irish medical profession are not members of any medical association or, in other words, two-thirds of the Irish medical profession decline to join any medical association, notwithstanding that they have been repeatedly invited to do so.

The fee for membership of the Irish Medical Association has been £1 1s., and on the payment of a further 5s. each member received weekly a copy of the *Medical Press and Circular*. The market value of the *Medical Press and Circular* is now, as in pre-war times, £1 1s. per annum, so that a subscriber to that journal could, on the payment of 5s., become a member of the association and share all its benefits. The financial provisions of the Irish Medical Association have, in the circumstances, proved inadequate for the continuance of its activities, and it is now proposed to increase the annual subscription to £2 2s. The annual subscription to the British Medical Association is £3 3s., and £1 10s. 6d. for newly qualified doctors up to the end of the fourth year after registration. Those subscriptions cover a copy of the *British Medical Journal* every week. The price of the *Journal* to non-members of the Association is £3 3s. The cost of the *Lancet* to annual subscribers is £2 2s., but it does not carry with it the membership of any medical association.

From those subscriptions it will be seen when members of the associations in Ireland deduct the cost of their journals, the contributions towards their medico-political and other activities are small, and compare very unfavourably with the money paid by other workers to their trade unions. In addition to the journals supplied by the associations and their medico-political activities, there are connected with both associations insurance agencies through which members receive substantial reductions in the premiums for their different insurances. Arrangements can be made by which a member selects his own insurance company and receives—on account of his membership—the usual reductions. In this way the members of the associations receive reductions in their policy premiums which are frequently three or four

times more than their annual subscriptions to the associations. There are, however, members and non-members who view with suspicion the insurance agencies connected with the associations, and cannot understand how they can get better terms through them than by insuring direct with the principal offices. The reductions are effected by the offices of the Associations acting as unpaid agents for the insurance companies and thus securing for the members terms less by the agents' fees which they would otherwise pay.

Regarding Irish medico-political activities in recent years: there were over 60 Irish Poor law unions visited within the past three years by the officials of the medical organisations, and it was mainly owing to their efforts, with the co-operation of the local medical men, that the salaries of the Poor Law medical officers in those unions have been increased by from 80 to 150%. The example of those unions was very helpful in other parts of the country where there was no direct representation made by the associations. Nevertheless, less than 40% of the Poor Law medical officers are members of any association, and the majority of them have never given as much as one five-shilling piece to any organisation concerned with the furthering of their interests. The minority, however, includes a good proportion of members who subscribe from £3 to £5 per annum to the medical organisations. Those members are, from a worldly point of view, nothing better off than their defaulting colleagues, but, unlike the latter, they wish to mark their appreciation of the services rendered to them by the medical organisations. That there are so many defaulters in the Irish medical profession can only be accounted for by the total absence of anything like a healthy public medical opinion. The great strength of the organised trades is the existence of a public opinion that would not tolerate for one day the shirking experienced in the medical organisations. With the trades equal gains must be met by equal efforts. Individual freedom is very precious, but when it takes the form of an individual licence which permits some persons to profit by other people's efforts there can be nothing said for it.

Anyhow, owing to the unrepresentative character of our Medical Associations in Ireland, even when acting conjointly,

it became necessary, if only in the interests of members of the medical organisations, to form, as far back as nine years ago, the Irish Medical Committee. That body is indisputably representative, and is so regarded by all the departments of the State concerned with the administration of medical affairs. Its representative constitution, however, rests upon the fact that all medical practitioners are free to have a voice in its policy, and that voice, if it is their wish, costs them nothing, and there is unfailing evidence, for the most part, that they wish it to cost them nothing. Any funds which have been subscribed for the Irish Medical Committee come, with few exceptions, from the members of the Associations. The Irish Medical Committee, owing to its accepted representative character by Government departments, has necessarily done in recent years a very large amount of medico-political work. Though indispensable, it could not exist, owing to the lack of funds, only that the Irish Medical Association and the British Medical Association put at its disposal their secretaries who discharged their duties in an honorary capacity. If the Irish Medical Association and the Irish Office of the British Medical Association did nothing else this would justify their existence and should command for them sufficient financial support from the Irish profession to make those Associations self-supporting, as well as to put them in a position to undertake work on a more comprehensive scale for the profession.

The fact, however, is that the Irish Medical Association is compelled from want of funds to limit its usefulness to meet its very moderate expenses. The British Medical Association, when opening its Irish Offices, with myself as whole-time Irish Medical Secretary, possibly expected it would be self-supporting, but it has never been anything of the kind.

Now we are on the eve—indeed, in some respects we are in the midst-of far-reaching medical changes in Ireland. Is the Irish medical profession, with regard to organisation, in a position to make its voice felt in the public interest and in its own, respecting the reforms which are taking place and about to come ? It is not, and that such is the case can only be expected from a profession which seems, in spite of every

effort, determined, for one or more reasons, not to be organised. What can be done ?

The first thing necessary is that the big majority of the Irish medical profession who are outside existing organisations should hold converse for half-an-hour with their consciences. This introspection may, though I am not too sanguine that it will, result in that Irish medical men, more or less as a body, will take leave of a self-centred and absorbing individualism, and a discreditable apathy which is too often pleaded as an extenuation, though a more offensive description would more accurately place such an excuse in its proper light. To join a medical association, with the punctual payment of subscriptions, is far from being everything, though in one respect, essential, if good and needed work is to be done. A man must be determined to live up to the rules and ideals of his association, and, by example and other influences, to get others to do the same. To do those things there is no need to be a superman. It only requires sufficient common sense to anticipate that it will prove to be the best and safest policy in the long run, and the only way, in the practice of medicine, to attain a soul-comforting happiness and a sufficiency of the material things which are indispensable to life.

There has been for many years amongst medical leaders in Ireland a genuine desire to have one medical body which would act as the mouthpiece and executive of the Irish profession. There is no general wish to wipe out any of the existing medical bodies in Ireland, as they all have served worthy purposes in their time. A medical association, to meet the needs of Irish medical practitioners, must have two sides—the scientific and the medico-political. The medical outlook of any member of the Irish profession is not so narrow as to entertain the belief that it is possible to have a distinctively Irish association in its scientific side. Medical science—like all other sciences—has no territorial or national limitations. Moreover, the production of a weekly Irish medical journal is obviously—particularly in the commercial aspect—an impossibility. Medical practitioners who desire to keep abreast with the knowledge of their profession will make provision for a weekly medical journal. In 1919, a meeting of medical delegates, fully representative of the Irish pro-

fession, considered the pressing necessity there was for one self-supporting medical organisation in Ireland. This meeting directed the appointment of a Joint Committee which had for its basis the following mandate : To consider the question of uniting the Irish medical profession in one representative organisation and the best method of attaining that object. The Joint Organisation Committee was subsequently appointed in accordance with the instructions of the meeting of delegates and consisted of five members of the Irish Medical Association, five members of the Irish Committee of the British Medical Association, and five members of the Irish Medical Committee. The recommendations of the Organisation Committee were unanimous and were on the following headings :

1. One Medical Body for all Ireland.
2. The name of the Medical Body to be the Irish Medical Union or Association.
3. The members of the Irish Medical Union or Association to be honorary members of the British Medical Association, with the following privileges :
   (*a*) Attendance at scientific meetings of the British Medical Association, including the Annual Meeting.
   (*b*) *The British Medical Journal*—with Irish news—in the form of a periodical Irish supplement.
   (*c*) The right to be enrolled as an ordinary member of the British Medical Association on taking up residence in Great Britain and the Colonies.
   (*d*) Representation, without the right of voting, at the Annual Representative Meeting of the British Medical Association, and two representatives on the Council of the British Medical Association.
   (*e*) Participation in scientific grants.
4. Arrangements for the payment *per capita* for the privileges requested.
5. The new Irish medical body to take over the finances of its own central offices, and Branch and Divisional expenses. The annual subscription for the new Irish Medical Body was fixed at £3 3s. per annum.

6. The medico-political policy of the Irish profession to be decided by representative meetings summoned under the auspices of the Irish Medical Union or Association.

Though this scheme was drafted only a little over two years ago, much, in the meantime, has happened in Ireland that may affect its successful working. The scheme was meant to apply to an unpartitioned Ireland, and in these circumstances a meeting of all Ireland delegates approved the scheme. The scheme, however, in accordance with the instruction of the meeting of delegates, was not submitted for final approval by means of a referendum to the Irish profession. The referendum contemplated by the meeting of delegates was to have the matter referred to local meetings convened for that and other purposes. A postal referendum, for most medical purposes, invariably proved a failure in Ireland owing to the prevalence of a real or affected apathy.

As you probably noticed, one of the unavoidable recommendations of the Organisation Committee is that the new Irish Medical Body should be responsible for the expenditure of its central offices, branches and divisions. The Committee also recommended that the Secretary of the Irish Medical Association and the Irish Medical Secretary of the British Medical Association be continued at the present salaries as the secretarial staff of the new Irish medical organisation. There is no doubt but both of those officials would find plenty of work to do in the new body, but from a too long personal experience of the finances that may be expected from Irish medical sources, I have no delusions with regard to them and their future possibilities, and I am certain that one, if not both secretaries, would draw blank on pay day.

Besides, as the result of my own disagreeable experiences in canvassing for new members and my efforts to retain the membership of my Association, even with my now narrowed outlook owing to age and other conditions, I should at once, if asked, decline to accept office under the new body, or any other body depending for its funds on Irish medical resources. I would be very glad to do its work, even in an honorary capacity, if I could afford it, but I have enough of ordinary self-respect left to decline to be under the necessity of begging

to get paid a salary for which I felt I had given a fair good return. I have no desire in this matter to obtrude the personal element, but it is unavoidable if earnest and liberal members of the Irish medical profession are to realise the obstacles they will encounter in forming a much needed unified medical organisation in Ireland. However, my experience with Irish medical bodies is only that of my predecessors in office—one of whom is still owed—and will be owed—a portion of the salary he well earned : another, now dead, and whose work was honorary, advanced out of his moderate resources a considerable sum of money to meet the expenses of the Irish medical organisation. Again there are not a few members of Irish medical committees who, to attend meetings of those bodies, have to travel at their own expense long journeys to Dublin. During such absence in the interests of their colleagues many of those same colleagues show their appreciation of the sacrifices of their representatives by taking over their practice and the fees that go with it. No other organised bodies in Ireland, even those of the humblest wage earners, work on such unprincipled lines.

I hope I have made the Section realise the very unsatisfactory condition of medical politics and medical organisation in Ireland, as well as the difficulties placed in the way of the big majority of the profession whose ambition is to practice their calling honourably and conscientiously. I believe, however, that any medical organisation, though fairly efficient, will not influence much for the better the actions of a certain proportion of the profession, especially if it has no other corrective at its disposal only the moral philosophy of an ethical sub-committee of a medical association. It should not be beyond the properly directed influence of the Irish medical profession to get the new Irish Government to establish a statutory Irish medical body with penal powers similar to the Incorporated Law Society in Ireland and the General Medical Council—but on a more comprehensive scale—for the regulation of the professional conduct of Irish medical practitioners. In the public interest this body is an absolute necessity, if unsuspecting people are to be saved from the unscrupulous doctor, who frequently in a mixed spirit of vanity, malignancy, and commercialism, tries to

score off a medical colleague who, sometimes in difficult circumstances, is ably and honestly acting in the best interests of his patient. If a successful doctor succeeds on strictly honourable lines he, all the surer, brings upon himself the hatred and excites the envy of a certain type of professional rival. The heads of State departments concerned with medical administration in Ireland know how difficult it is for honourable members of the profession to discharge conscientiously their official medical duties in the face of the methods of a limited number of the undesirables of our profession, and would be glad to support the medical profession in their demand for a statutory medical body, with ample penal powers, for the regulation of professional conduct in the practice of medicine.

When introducing my subject I stated that if we were to do any good I should treat medical affairs as they exist in our Irish profession, but they are nothing worse than they are elsewhere. It is not, nevertheless, an extravagant description to call the medical profession great and noble in spite of its inevitable misfortune to have amongst its members a certain proportion of men whose temperaments are entirely unsuited to an avocation that is continually making unstinted calls on the highest traits of humanity.

TRANSFUSION OF BLOOD.

By Henry Stokes.

MR. President, Ladies and Gentlemen,—In opening the subject of blood transfusion I have assumed a position which is not justified by my limited experience. I only have notes on 29 cases which I have transfused in the past two years, but I have assisted at a considerably larger number whilst I was in the Army, about which I have no records.

Therefore you will not be asked to hear statistics or descriptions of various cases. I hope that this meeting will help to spread the knowledge of the subject, and also assist in the organisation of a body of blood donors in Dublin.

The recent literature of transfusion is so extensive that references to individual authors would become wearisome. Suffice it to point out that an excellent summary will be found in the Mayo Clinics of 1918 and 1920.

Blood transfusion has from the earliest times awakened the interest of the medical profession. Since 1650 many operations have been recorded. The practice was rare until 1850 and remained a local practice until the modern methods adopted became widely known during the Great War.

The objects of transfusion may be summarised as :

1. To supply fresh blood.
2. To stimulate blood formation.
3. To increase the coagulation of blood.
4. To supply anti-bodies.

With regard to the type of cases dealt with, two stand out pre-eminently :

1. Sufferers from hæmorrhage and shock.
2. Debilitated patients previous to operation.

Other cases benefit to a lesser degree—Hæmophiliacs and sufferers from purpura ; cases of pernicious anæmia and allied diseases ; simple anæmias ; toxic conditions, such as

*Read before the Section of Surgery, Royal Academy of Medicine in Ireland, December 16th, 1921.

septicæmias, eclampsia, and nephritis; carbon-monoxide poisoning.

The chief difficulty which has to be overcome is, of course, the coagulation of the blood. This has been approached by many methods, all of which are now obsolete except two.

No. 1. The use of vessels coated with paraffin wax.

No. 2. The Citrate Method.

The "Paraffin" Method consists in collecting the donor's blood directly into a glass vessel coated with a layer of paraffin wax. It is by no means a simple method. It involves having the donor and the recipient both in the operating theatre, and necessitates two operators. Further, it entails the exposure and subsequent ligature of a vein in each patient. The preparation of the glass vessels is by no means easy. I have seen failures, each involving the loss of a pint of blood, due to coagulation, which have been generally ascribed to defects in the wax coating The mere insertion of the fine glass nozzle into the veins is often difficult.

However, when the operation is successfully performed the Paraffin Method is probably the better.

The Citrate Method consists in letting the donor's blood flow rapidly into a vessel containing sodium citrate solution, which prevents coagulation. Blood so collected may be kept, without apparent harm, for a considerable time, and used in exactly the same way as normal saline solution. As this is the simplest and most practical method, I will dwell on the details.

The outfit is simple:

1. A bandage.
2. A glass funnel.
3. Four feet of thin rubber tubing.
4. One large bore serum needle.
5. One fine bore serum needle.
6. One drachm of sodium citrate in 4 oz. of water.
7. Half a drachm of pure salt (Na Cl) in 4 oz. of water.
8. A quart vessel graduated in ounces.

Use the bandage to constrict the donor's veins above the elbow.

Use the larger needle to bleed the donor straight into the

quart vessel, which already contains some sodium citrate.

Use the funnel, rubber tubing, and smaller needle to introduce the blood into the recipient's vein, and having filled the tube up with the salt solution and got rid of all air bubbles, insert the needle and let a little saline solution run in, to make certain the point of the needle is in the lumen of the vein.

Then slowly pour in the citrated blood, watching the patient carefully.

If the pulse gets slow or the patient complains of precordial pain, pain in the abdomen or back, go still more slowly, and if he gets restless or at all cyanosed stop altogether. On the contrary, if he does not complain you may increase the rate of flow. I find that if the funnel is about 30 inches above the vein the flow will be satisfactory.

As a rule the recipient makes no complaints, but about 20 minutes to an hour after the operation a reaction occurs in one out of every four patients. This is characterised by a rigor, fever, headache, possibly nausea, and diarrhœa,

Within 12 hours the recipient's condition is again normal.

The first change I have noticed in the recipient is an improved pulse, quickly followed by better circulation in the ears, cheeks and fingers. By the end of the operation the voice is markedly stronger and the mental condition more active. In certain cases the immediate effect is miraculous, yet the improvement is progressive on account of the stimulation to blood formation.

I wish to tell you about one case : an American soldier, aged 18, who had received a gunshot wound of the chest some weeks previously, was suffering from a septic hæmothorax which quite filled up the left pleural cavity. He was coughing up blood ; he was vomiting blood and had passed much blood by rectum. He had many subcutaneous hæmorrhages and looked close to death. His pulse was not to be counted at the wrist. His voice had nearly gone. His clergyman had been with him, and I had quite given him up. As a last resource, and at great risk, he was moved to the theatre, aspirated and transfused.

The last thing he said to the sister in charge was : " I guess, sister, I will be in hell's flames in twenty minutes." She had difficulty in hearing his words.

When he was put back to his bed he called out for all to hear: "Say, sister, I don't want that preacher here again to-night."

This patient got in all 126 oz. of blood. A large piece of shell was removed from his lung, and he made a rapid and complete recovery.

The supply of donors is a matter of great difficulty. Though I wish to state that I never yet have been held up for lack of a volunteer, yet sometimes their blood is not suitable.

The difficulty arises partly through the idea that the loss of blood suffered is injurious to the donor's health, and partly through the difficulty of having the donor on the spot in an emergency.

Now as to the first difficulty it is hard to disprove. Stories are repeated that so-and-so got typhoid a month after he gave blood, so-and-so got run down and had to take a holiday, a third got a dislocation of a cartilage playing football. These stories do not originate with and are not repeated by the donors, but for all that they get around, and though some are ridiculous, others may be well founded. I do not wish to be dogmatic, but I have kept track of some 14 donors and none of these as far as I can learn are any the worse. When I pointed this out I was informed that it was only those donors who were not paid for giving their blood that were liable to breakdown.

I would welcome any evidence on this point.

How to have a group of donors available for emergencies is a puzzle I have not solved, but I suggest that it is the duty of all of us to have our bloods standardised so that time need not be wasted when the demand arises.

The question of a fair fee to the donor has to be considered. I have personally valued blood at £5 5s. the dose, but recently advertisements have offered £20 a dose in Dublin.

The selection of cases to be operated on gives rise to more difficulties.

There are so many debilitated patients with cancer, tuberculosis, etc., whose best hope, though a poor one, is an extensive operation; and again cases of pernicious anæmia who would undoubtedly receive much temporary benefit

from transfusion, yet I hardly feel justified in asking for blood in these cases. I would much prefer to reserve it for cases where there is hope of ultimate complete cure.

The cases that appeal to me are women who have bled during labour, hæmorrhages from gastric ulcers, and similar conditions.

The ideal conditions will not be attained until we have a group of donors which will at any hour—day or night—be ready to give blood to save life.

There is a question that requires an answer: How does blood transfusion compare with the intravenous injection of normal saline, saline and dextrose and gum? It is obvious that these solutions do not supply the want of oxygen-carrying corpuscles, neither do they increase blood coagulation. What they do is to raise blood pressure. In the case of gum solution this increase of pressure is *not* rapidly followed by any marked fall: in fact the increase is comparable to that following the transfusion of blood. However, the preparation of gum solution is very difficult, and the indications for its use in civil practice comparatively rare.

With regard to intravenous saline, I dislike it. I am sure I have killed patients by its use. What happens is that the patient leaves the operating theatre in fair condition and dies from collapse a few hours afterwards.

These remarks are not to be applied to the subcutaneous or rectal administration of saline, which act in a different manner and may be very useful in certain cases.

Since writing the above I yesterday received the 1920 volume of the Mayo Clinics, in which there are articles on The Cause of Reactions to Intravenous Injections. The authors point out that one, if not the chief cause, is some toxic substance derived from new rubber tubing and show that reactions can be avoided by steeping the rubber in sodium hydroxide solution before use.

The articles are very interesting. There seems no flaw to be found in the proofs, and should the observations prove true, the greatest objection to the use of the Citrate Method will now have been eliminated.

REMARKS AT THE DISCUSSION ON BLOOD TRANSFUSION, SECTION OF SURGERY, ROYAL ACADEMY OF MEDICINE IN IRELAND, DEC. 16, 1921.

By Geo. E. Nesbitt.

THE uses of transfusion of blood have been amply demonstrated in recent years, particularly during the war, but the practice does not appear to have been widely adopted in this country up to the present. The main reason is probably the difficulty of providing a suitable range of donors, and in procuring their services on the comparatively rare occasions when they would be required in our individually small hospitals. The procedure is, however, an ancient one, and dates from the attempts made to save the life of Pope Innocent VIII. in 1492 by administering human blood by mouth. Since then it has had many alternations of popularity and the reverse. It is not possible to survey the various steps in the development of the method, but it is of interest to note that the first citrate transfusion of human blood was performed by Prof. Agote, of Buenos Ayres so recently as November, 1914.

The cases in which transfusion is indicated may be divided into two groups : (1) Those in which actual loss of blood from various causes has produced a dangerous crisis, or where it may be advisable to improve a patient's condition before operative procedures can be undertaken. This group is by far the larger, and has given the most brilliant results. (2) Those cases in which a lack of some essential substances may be presumed, *e.g.*, antibodies, agglutinins, etc., and where the addition of *healthy* blood to the patient's depleted or deteriorated stock would seem rational. Its use in this group has been comparatively restricted, but it has been frequently employed in severe anæmias, leucæmias, intractable hæmorrhage, etc. It practically amounts to the use of *human* antiserum or normal serum, with the additional advantage of the red

corpuscles. My own experience, though small, has been mainly with cases of this type.

Blood Testing.

Where cases are transfused only occasionally, there is some difficulty in keeping supplies of efficient Group II. and Group III. sera. I have generally tested patient and donor directly, as it is not always easy to obtain a willing donor, and having secured one, the natural step is to ascertain whether this particular one will suit the patient. The additional loss of time is small—the result should be available in fifteen minutes. The usual method of a drop of the patient's serum with a drop of the donor's blood has been followed. As a rule the result is quite clear, but cases occur, for example in severe types of anæmia, where a somewhat indefinite reaction seems to take place, and it is possible that the profound alteration of the patient's blood may produce deficiency or exaggeration of agglutinins.

Method.

My experience has been confined to the citrate method, which seems the safest and simplest. The strength of citrate used appears to vary greatly. For instance, Pemberton, of Mayo Clinic (Surg. Gyn. and Obstet., March, 1919) uses a 2% solution of citrate of soda, 30 c.c's (*i.e.*, 0·6 gm. citrate) per 250 c.c's of blood. This gives a strength of 0·24% citrate in the blood. On the other hand, Rendle Short and Robertson (*Medical Annual*, 1919) use a 3·8% solution of citrate, putting in 160 c.c's (*i.e.*, 6 gm.) for 20 ozs. of blood. This works out at 1·2% in the blood, and is exactly *five times* the strength of the other.

The apparatus I employed was copied from that of Robertson and I used the same strength of citrate. On two occasions I was horrified to find that some clotting had occurred in the bottle, and I have not yet discovered the explanation.

The jumping out of the cork when positive pressure was applied, in spite of attempts to tie it down, was also annoying, and I have tried to improve the apparatus by substituting a long (606) funnel for the bottle. This gets rid also of a certain amount of tubing, which would seem dangerous from the point of view of clotting.

It is scarcely necessary to refer to the difficulty of vein puncture in very anæmic subjects—it is partly a matter of skill and to some extent of luck, but the attempt can be very irritating.

Results.

I have generally found a fairly sharp reaction after a couple of hours, with chill, rise of temperature, etc., but this speedily passed off. No serious sequelæ were experienced, and no signs of discomfort or cause of anxiety were encountered during the actual transfusions in either patient or donor. This may be partly due to the fact that I have always used small quantities of blood (200-250 c.c's). In America much larger amounts are habitually given (500-1,000 c.c's). Crile emphasises the risk of acute cardiac dilatation, the leading signs been præcordial pain, dyspnœa, and failing pulse. As these are identical with those of collapse, the condition may be overlooked. He says that the diagnosis may be made by watching for an increase in the area of cardiac dulness, and the treatment is immediate stoppage of the transfusion and compression of the chest.

The absence of immediate improvements in the colour and appearance of the patient is often disappointing, but Ottenberg points out that the addition of even 1,000 c.c's of blood to an average patient will raise the percentage of hæmoglobin only 8%. It has been noted, however, that a subsequent increase of hæmoglobin may take place apart from any increase of cells. This has been attributed to increased concentration of the plasma.

It is also noteworthy that the addition of this somewhat large amount of citrate to the patient's blood does not lessen, but if anything increases, its coagulability.

In the types of case of which I have had most experience, *e.g.*, pernicious anæmia, I have found only temporary improvements, but I freely admit that I have not trusted the method. Remarkable results have been published from Mayo Clinic and elsewhere. One very striking phenomenon was observed in a recent case of clinical pernicious anæmia with anomalous blood picture of a plastic type. A transfusion completely altered the picture within a few hours, causing the appearance of a flood of nucleated cells, many in active division (Film

shown). By the following day this had passed off, and the blood resumed its former appearance. Precisely the same phenomenon followed a second transfusion. The influence of the healthy blood on the blood-forming mechanism was apparently very profound, though short-lived. I have not seen any description of this effect in the literature, but it is worth watching for.

Lewisohn says that transfusion of blood (by the citrate method) possesses "four advantages of extreme importance: facility, rapidity, efficacy and security." As such it deserves more extended trial in this country.

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BOOKS.

THIS MONTH'S SPECIAL REVIEWS.

The Life of Elie Metchnikoff : 1845-1916. By Olga Metchnikoff. With a Preface by Sir Ray Lankester, K.C.B., F.R.S. London : Constable & Co., Ltd., 1921.

It is rare indeed to meet in a biography such a clear portrayal of the inner thoughts and characteristics of an individual, from early childhood up to death, as one finds in the volume now before us. Indeed, such a clear and sympathetic account, one feels instinctively, could have been written by no one but Madame Metchnikoff herself. During the early part of Metchnikoff's life she was his constant companion and co-worker, and the recipient of all his confidences. Furthermore, in anticipation that his life history would be written, Metchnikoff revealed to his wife the story of his earlier years. From his earliest manhood he felt a call to scientific research and actually published a record of his first original investigation at the age of 18. From that date, for 50 years, he devoted himself practically exclusively to biological problems. His life at the beginning was very chequered, and it was only with difficulty that he succeeded in maintaining himself, but when, at about 40 years of age, he finally settled in Paris, a period of great productiveness, accompanied by calm and content, began. To the lay and medical public Metchnikoff is principally known for his researches on phagocytosis and for his theories on the prolongation of human life, by producing a change in the intestinal flora, but it is hardly realised that the building up of these theories led him into many by-paths of science, and necessitated most arduous and wide-flung researches. It is curious to reflect that he who urged the importance of prolonging human life should have himself, in early manhood, suffered from pessimism so great as to lead him to attempt his own life.

To refer in any further detail to this admirable biography is unnecessary. It is a notable contribution to biographical literature, and most vividly depicts the life struggle of an inspired scientist.

The Transactions of the Edinburgh Obstetrical Society, Session 1919-20. Vol. XL. Pp. 147 + xxviii. 8vo. Edinburgh : Oliver and Boyd, 1920.

The transactions of the Edinburgh Obstetrical Society are, like those of a similar kind, extremely valuable : it makes one wish, possibly, that in addition to this excellent Journal of ours that the Irish Academy transactions could be produced in the old-time fashion. There are several extremely interesting and praiseworthy communications, and one of the most scholarly is the valedictory Presidential Address of Sir Halliday Croome. There is an original communication on " Colour Scheme in Pregnancy " and an excellent paper by Berry Hart on " The Prevention of Sepsis " : in the latter he divides the factors in puerperal septicæmia into (1) imperfect antisepsis and asepsis, local and general, and (2) defects in local technique on the part of the obstetrician. In the discussion on this noteworthy monograph it is astounding to find that many of the speakers boldly declare that they never use gloves in midwifery cases ! Those who are working on hydatidiform mole will find it useful to consult Brown's paper on this subject and Robertson in writing on vaccine therapy in gynæcology and obstetrics provides much food for thought.

B. S.

The Surgery of Peripheral Nerve Injuries of Warfare. By Henry Platt. M.S. Lond., F.R.C.S. Eng., Hon. Surgeon and Surgeon-in-Charge, Orthopædic Service, Ancoats Hospital, Norchester : Hunterian Professor, Royal College of Surgeons. Bristol : John Wright and Sons, Ltd. 1921.

This brochure consists of the Hunterian Lectures delivered before the Royal College of Surgeons in 1921. In it the author gives the results of a series of over 500 personal operations and the deductions to be drawn therefrom. With regard to the topography of nerves, *i.e.*, the position in the nerves of special bundles to supply particular muscles. Elsberg of New York, considers that it is possible to recognise corresponding bundles on the cut surface of the proximal and distal ends of injured nerve trunks from rules laid down from recent anatomical observations made by his associates. In the author's

opinion, such a meticulous proceeding is theoretical rather than practical. The lesson of topography, in relation to nerve suture, is the simple avoidance of torsion of either the proximal or distal stumps. Nerve anastomosis in the nerve surgery of the war has failed to justify its inclusion in the operative methods applicable. From clinical and operative experience there is no evidence to show that the widest freeing of nerve trunks causes either a retardation or complete inhibition of the process of regeneration after nerve suture, and still more that any gross retrogressive changes in the component tissues of the nerve trunk ever occur. In peripheral nerve surgery, then, the widest exposure and mobilisation of the nerve trunk when considered necessary as an aid to end-to-end suture is a safe and justifiable procedure. From a close observation of the living pathology of injured nerves, the routine use of direct electrical stimulation at operations, and a critical digest of the proved effects of neurolysis, it appears that the war lesion is not only above all a primary lesion, but that the influence of the perineural surroundings on the nerve conduction is usually subordinate and often entirely negligible. This is one of the striking pathological differences between the warfare and civil nerve lesion. For diagnostic and prognostic purposes, the value of the traditional methods of external electrical testing is limited. In the irritative syndrome, the pathological change is always one of the forms of incomplete lesion, and often a lesion in which the nerve trunk shows little or no external change in form. Definite intraneural changes are, however, never absent, and are to be recognised as the essential cause of the symptoms of irritation, the influence of perineural scarring in the production of the symptoms has been negligible. The condition has only been seen in the median, sciatic and internal popliteal. The efficacy of the operation of early resection and suture for severe causalgia is beyond criticism. It would appear to be a more exact procedure than the equally or even more destructive method of alcohol injection.

The operation of endonemolysis, in which an attempt is made to remove the rear tissue between the individual nerve bundles has proved in actual practice to be of little value, as might have been expected. Tension sutures which have

been extensively used, have not been found to act in a deleterious fashion towards the regenerative process. It would appear to be harmless provided that it is not pulled so tightly as to crush the nerve-ends together. The influence of the suture material depends on its calibre more than on its nature. The use of ensheathing material is to be avoided except in those regions where the nerve would lie in direct contact with bone or tendons which have lost their normal coverings. It is therefore generally necessary after suture of musculo-spinal nerve in the lower half of the arm, or in suture of the median at the wrist and is provided in an efficient manner by carrying a small pedicled muscle flap underneath the nerve trunk. The operation of nerve crossing should be absolutely condemned, as it not only leads to no regeneration in the originally injured nerve, but it leads to interference in the conduction in the nerve used for crossing. As a general rule sutures performed within a period of eighteen months show little appreciable differences in the time of the onset of recovery or the rate and ultimate completeness of the recovery ; after a delay of two years recovery is often seen to be tardy, incomplete, or in some cases fails completely. In the recovery stage of a number of sciatic nerve sutures, the trophic ulceration, where definite necrosis has resulted, provides a continued source of infection which might conceivably be absorbed and travel up towards area of suture. Delay or cessation in recovery has been invariably associated with this complication, and it may be connected with the absorption of sepsis by the regenerating nerve. In an appendix is a detailed analysis of the results of all the cases of suture. There are 12 illustrations. No. 11, which is a photograph of an operation for exposure of the ulnar nerve, would be of more use if it was easier to recognise the position of the arm, which has been rendered difficult by the arrangement of the covering sheets. R. A. .S

Injuries of the Peripheral Nerves. By Henry S. Soultar, C.B.E., F.R.C.S.Eng., and Edward W. Twining, M.R.C.S Bristol : John Wright and Sons, Ltd. 1920. Pp. 152. Figs. 30

In a foreword the authors state that they have made no attempt at an exhaustive treatment of the subject, nor to

write a text-book, but have sought to gather into permanent form the observations of several years of a very special experience and to apply to the demands of civil life what has been learnt from the study of these injuries in war. Their hope that the volume will stimulate interest, enforce its importance, and be of some assistance to others, is certain to be fulfilled. The first three chapters are devoted to a detailed description of the changes occurring in the nerves and surrounding tissues. The following three to examination of a case: first general, then sensation, and then motor. The results of nerve division, both general and for special nerves, follows; and after chapters on general diagnosis and recovery, details of operation are given. There are several chapters on after treatment and alternative methods. Finally, two chapters on painful lesions and their treatment.

In the chapter on technique the authors recommend the use of fine catgut for suture, as they state that silk is certain to stimulate the growth of fibrous tissue. This we cannot pass without a comment; by using silk a much finer thread can be used and less injury done to the nerve fibres, the sheath only being included in the sutures. There is a danger that very fine catgut may absorb too quickly unless specially prepared, in which case it is liable to be stiff and difficult to work with. The authors do not consider that the penetration of the nerve is a matter of any moment. In the vexed question of grafting they consider that autogenous grafts are the only ones of which they have been able to find authenticated successful records. They have also had successful or partially successful results from the flap method and from anastomosis. Very full details, which will be found of great practical use, are given of the methods of dealing with the various nerves of the limbs liable to injury; and these directions are accompanied by good full-page illustrations. The only remark that we would make about these is that in many cases they are unnecessarily large, and the points could have been as well illustrated by simple diagrams. In the chapter on alternative methods, tendon transplantations, mercurialised silk, artificial ligaments, ankylosis of joints and external appliances are all considered.

Causalgia, they find, is chiefly found in lesions of the median

and internal popliteal, two nerves which as they remark share the peculiarity that each has an artery of considerable size for its supply. And they suggest that the true pathological basis of the pain is some alteration in the intrinsic vascular supply of the nerve, affecting chiefly those fibres which supply two of the most sensitive regions of the body. For this condition they recommend the injection of 80 per cent. alcohol. In one very severe case involving the sciatic nerve and which was not cured but rather made worse by amputation and later by section of the nerve in the gluteal region, they obtained a successful result by dividing the antero-lateral tract of the cord on the opposite side in the upper dorsal region.

The use of this book for reference purposes is greatly enhanced by the practice adopted of marginal headings to the paragraphs. It may be confidently stated that this is a book which any surgeon who takes an interest in or who may have to treat cases of peripheral nerve injuries should have at hand for reference.

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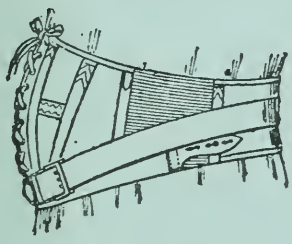

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ABSTRACTS OF CURRENT LITERATURE.

OTO-RHINO-LARYNGOLOGY AND OPTHALMOLOGY.

CAZIJUST: *Anatomy of the Superior Laryngeal Nerve at the Site for Neurectomy.* "Revue Laryng. d'Otolog. January 31, 1922.

THE author comments on the fact that section of the superior laryngeal nerve has gone out of fashion in favour of alcohol injections for the relief of pain in tubercular laryngitis. This he attributes to the faulty and vague descriptions of the position of the nerve at the site of election in the anatomical text-books.

In a series of 30 dissections specially carried out to determine this point he demonstrated that the relationship of the nerve to the superior laryngeal vessels was by no means constant. He describes a "Quadrilatère de découverte" as the position in which the nerve should be sought for. This quadrilateral is bounded by the hyoid bone above, the thyro-hyoid muscle in front, the upper border of the thyroid cartilage below, and the lateral thyro-hyoid ligament behind. This area forms the deep part of the lateral thyro-hyoid space described by Poirier and Picqué.

1. *Relationship of Nerve to Superior Laryngeal Vessels.*—The classical description of these structures travelling parallel between the thyro-hyoid membrane muscle is vague. As a matter of fact in most cases the nerve was found lying deep to the vessels and separated from them by as much as one centimetre by dense connection tissue. In one dissection the nerve lay in the groove between the vessels; in another it curved through the overlapping vessels.

2. *Relationship of Nerve to Hyoid Bone.*—In the minority of cases only was the nerve found parallel to the large horn of the hyoid; sometimes it crossed obliquely from above, and once obliquely from below.

3. *Relationship of Nerve to Thyro-Hyoid Muscle.*—In the majority of cases the nerve was found to penetrate the larynx outside the muscle, not under cover of it, as usually described.

4. *Relationship of Nerve to Thyro-Hyoid Membrane.*—The nerve lies deep and covered by well defined fascia. penetrates the membrane in varying sites—in almost half the cases this occurred mid-way between the thyroid and hyoid, but it may penetrate just under cover of the lower surface of the hyoid.

In conclusion, he emphasises the fact that a general description cannot be given of the nerve and its relations—such must of necessity be misleading. In certain cases the nerve gives off collateral branches and these require section in order to obtain freedom from pain.

J. S. J.

PORTMANN, GEORGES (Bordeaux) : *Treatment of Ethmoidal Suppuration by the Nasal Route.* "Presse Medicale," No. 24, April 21, 1920.

INFECTION of the ethmoidal labyrinth is a frequent cause of those cases of interminable rhinitis which are the despair of patients. The author, having pointed out that it is still too often disregarded, considers that when it is treated systematically and radically,—and radical treatment is alone effective,—the prognosis of nasal suppuration will be greatly improved

M. Portmann, following the Bordeaux school, is a convinced adherent of the radical operation by the nasal route. He describes its technique : Local anæsthesia with cocaine in 10% solution ; ablation by means of a cold snare, or by the extraction of the accessible polypi ; excision with flat pincers or "bec de canard" pincers of the middle turbinate bone and ethmoidal cells within reach. The ethmoidal labyrinth being opened, *a thorough cleansing* of the ethmoid is then effected by means of Moure's scoop, an instrument rendered harmless by its shape.

The hæmorrhage is generally small. No plugging is needed. Post-operative local treatment—none : the nasal fossa is not to be touched, no powder, washing, or pulverisation is required.

This method, which is simple of execution, is also simple in its consequences, and according to the author, deserves to be more generally practised than it has been up to now.

PORTMANN, GEORGES (of Bordeaux) : *Tonsillar Adenitis.* "Revue de Laryngologie d'Otologie et de Rhinologie." No. 12, 30th Juin, 1920.

THE author gives this name to a kind of inflammatory growth on a level with the palatine tonsils, and which is a real sub-acute hypertrophy, clinically and histologically different from chronic hypertrophies and acute tonsilitis.

Tonsillar adenitis, an affection of children, youths and young men occurs on a sound normal organ having previously undergone tonsillotomy. It is subordinate to any cause of common infection.

Histologically it offers the characteristics of a double lesion corresponding both to simple adenoid hypertrophy and a sub-inflammatory and infectious state ; it is a subacute tonsilitis with lymphoid hyperplasia, without other macroscopic manifestation than a notable increase in the volume of the organ.

The local symptomatology lies solely in the great dimensions of the tonsil, without conspicuous alteration of its surface : the mucous membrane is neither ulcerated nor bleeding, and is covered by no exudate of caseous matter. There is frequent coexistence of an hypertrophy of the lingual and pharyngeal tonsils with a special involuement of sub-maxillary and deep cervical glands.

The functional symptoms, produced by the volume of the organ, are those of chronic hypertrophy.

The evolution is typical, for, being essentially subacute, tonsillar hypertrophy establishes itself in the course of three or four days together with cervical adenitis and without general symptoms; after a period of two or three weeks the tumefaction is attenuated, and in four or five weeks the normal condition is restored.

The diagnosis of tonsillar adenitis, as differing from chronic hypertrophy and acute tonsilitis, offers no difficulty; the evolution, local appearance, and general symptoms being quite distinct; clinical examination also enables one to distinguish it from lymphomatosis and lympho-sarcoma. But there are two affections which it is practically impossible to discriminate from tonsillar adenitis and for which the help of the laboratory is absolutely necessary, namely, secondary syphilitic hypertrophy and the hypertrophic form of tuberculous angina.

Tonsillar adenitis, which is liable to relapse, is the sign of a lymphatic disposition, and shows the necessity of a careful watch over the growth of children who suffer from it.

PORTMANN, GEORGES (of Bordeaux): *Lymphangio-Sarcoma of the Naso-Pharynx.* "Bulletin de la Société Anatomique de Paris," July, 1920.

THE author gives the report of a patient who presented a tumour on the right half of the cavum, a large fragment of which was drawn back by running the finger into the naso-pharynx. This fragment, of a soft consistency, reddish colour and spongy texture, had the appearance of a mass of adenoid vegetations.

Pathological examination, however, established the presence of a complex neoplasm consisting (*a*) of a sarcoma having round cells in some places and spindle-shaped cells in others; (*b*) of a genuine capillary lymphangioma.

The term "capillary lymphangioma" was justified by the great abundance of lymphatic vessels, their considerable size and their structure could not exist on the lymphatic vessels of a healthy mucous membrane.

This particular texture accounted for the softness and spongy nature of the tumour, being quite an abnormal characteristic of a sarcoma of that part, and justified the term "lymphangio-sarcoma."

HOMER E. SMITH: *The Problem of the Immature Cataractous Lens.* "New York Medical Journal," October, 1921.

IN this paper Smith discusses the different methods of treating immature cataract, and limits the choice to removal of the lens in its capsule or the operation advocated by him. The former method involves a forcible rupture of the zonula previous to the extension of the lens, This may be attained by one of five procedures:

1. Pressure applied to the corneal surface directly backwards.
2. Pressure applied to the lens direct.
3. Traction on the zonula by grasping the capsule in forceps.
4. Traction on the zonula by means of suction.
5. Rotation of the lens by means of a hook slipped into the substance of the lens near the equator.

Whilst admitting that some of these methods are less open to objection than others—especially No. 5—the same objection holds good in all, namely, that any operation which forcibly tears the zonula, and which can inflict a damaging trauma on the ciliary body is bad surgery. The method of operation presented by Smith puts mature and immature cataracts on an equal operative footing. This consists of a preliminary capsulatomy, the eye first having been atropinized. The patient then being put to bed for a period of about six hours before the extraction of the lens. The capsulotomy—the essential and important part of the proceedings—is performed as follows :

A specially designed knife is made to enter the anterior chamber blade downwards, through a puncture at the upper temporal quadrant. The blade is carried down to the lower margin of the dilated pupil, its edge pressed against the capsule, and then made to describe an arc, dividing the capsule in the vertical meridian. This vertical cut having been made, the blade is carried to the pupillary margin in the opposite meridian, and a transverse cut is made. The blade is then withdrawn, and the patient put to bed for six hours. Irrigation of the anterior chamber with warm normal saline solution after delivery of the lens is essential, to get rid of any lens fibres adhering to the posterior capsule.

No statistics of the results of operations performed by himself are given, but of 180 operations performed by other surgeons 91% were successful, 6% partially so, whilst the remaining 3% were failures.

In conclusion he claims that this method of operation is safe, makes cataracts operable at any stage of opacification, and assures a clean and easy delivery of the lens.

GYNAECOLOGY AND OBSTETRICS.

CRAINICIANU and POPPER : *Liver Insufficiency in the Pregnant.* "La Presse Méd.," XXIX, 43, 424.

THESE authors conclude that during the last months, pregnant women not presenting signs of any other affection, old or recent, which could cause a lesion of the liver, in 20% of cases signs of biliary retention are present, and in 33% digestive "hémoclasie" (leucopenia following the ingestion of food) clearly positive, a fact which indicates latent liver trouble. Outside those cases which cannot be discovered by the finest tests of which "hémoclasie" is the type, one finds liver insufficiency to a high degree of which the clinical expression is jaundice, or if the insufficiency is very grave, malignant jaundice. They believe that in the last case induction of abortion would cause an improvement in

the general state of health. By diet and above all attention to the bowels, pregnant women would avoid toxæmias. It would be useful to examine from time to time for signs of urinary insufficiency and "hémoclasie." Chloroform is not advised in toxæmic cases because of the deleterious effect on the liver. At labour the best anæsthetic is nitrous oxide combined with oxygen. In other words these authors believe that the toxæmias of pregnancy are often caused by proteins from the intestinal tract which affect the liver.

BETHEL SOLOMONS.

Pregnancy and Labour in Young Primiparae.

HANIS ("Bull. of Johns' Hospital," XXXIII., 371, 12) states that from a study of 500 patients it is permissible to conclude that pregnancy and labour are attended by no greater danger in the young primipara than in the older woman. The duration of labour is shorter, and the size of the children is not inferior to those of older women.

BETHEL SOLOMONS.

PROUST and MALLET: *Respective Indications for Hysterectomy, Radium (Curiethérapie) and Deep X-Ray Treatment for Cancer of the Neck of the Uterus.* "La Presse Médicale, XXX., No. 9, 1922.

THESE authors, in a critical paper state that the extended abdominal hystererectomy is the best treatment when the indications are carefully weighed from the point of view of cure percentage, but the immediate mortality rate is by no means negligible.

Preoperative radium is advised, because when given three weeks before operation it causes no harm and sterilises the field, but preoperative *x*-rays are not recommended because of skin troubles and because of conditions unfavourable to scar formation. As an addition to operation, however, and done a good month after (when the deep scar is perfect), penetrating *x*-ray treatment is absolutely indicated. Postoperative radium treatment is rejected because the limit of action of the rays disappears with removal of the uterus, because the situation of the tube in the operation wound is without the precision necessary for a homogeneous radiation and because of the possibility of necrosis of the tissues.

BETHEL SOLOMONS.

BOURNE and DUNCAN: *Nitrous Oxide—Oxygen Analgesia and Anaesthesia in Obstetrics.* Canadian Medical Association, XI., 11, 818.

THE writers are active counsels for this method of anæsthesia in obstetrics. The technique for normal labour is as follows:

When labour is definitely established one-twelfth to one-sixth of a grain of heroin, or one-sixth of a grain of morphine is administered. This allays the pain of the first stage, the nitrous oxide-oxygen being

more particularly reserved for the second stage ; at or near the completion of the first stage the anæsthetist is called who applies a blood pressure apparatus along with a bracelet stethescope. Readings are recorded together with pulse and respiratory rate. The fœtal heart rate is also charted. A beginning is made with nitrous oxide 80% and oxygen 20%. With the delivery of the child oxygen 100% is given.

A plea is advanced for the use of this method in the toxæmias of pregnancy when it should prove most useful. We fear there is one definite fallacy in this paper—the dose of heroin or morphin will not allay the pain of all first stages. The communication concludes with a lengthy summary.

BETHEL SOLOMONS.

SCOTT : *Haemorrhage from the Non-Pregnant Uterus in the Absence of a Neoplasm.* 'American Journal of Obstetrics and Gynæcology," II., 5, 479.

IN a monograph which is furnished with a valuable bioliography Scott states that—

1. The histologic findings in cases of idiopathic uterine hæmorrhage are not constant.
2. In the majority of cases, the uterus is enlarged, hard and thick-walled. and contains an excessive amount of elastic tissue, the result of subinvolution.
3. But bleeding does occur in some instances, from uteri which do not show the gross or microscopic findings of sub-involution.
4. Not only may bleeding occur without these findings, but furthermore, the histologic picture of fibrosis uteri may be present without any abnormal bleeding.
5. The most constant histologic finding in bleeding cases is one of glandular hyperplasia of the endometrium.
6. This glandular hypertrophy and the bleeding are likely due to a common factor, which is probably ovarian.
7. Treatment is preferably by means of *x*-ray or radium.

BETHEL SOLOMONS.

WATKINS : *Ovulation and Menstruation as Post-Operative Conditions.* "American Journal of Obstetrics and Gynæcology, II., 5, 489.

WATKINS considers that menstruation is a handicap Nature seems to have been obliged to impose upon woman for the accomplishment of pregnancy, and states that menstruation should be abolished by means of supra-vaginal hysterectomy in the course of abdominal pelvic operations when conditions obtain which make pregnancy impossible or inadvisable. In Watkins' hospital there are generally not more than two or three operations for displacement in the year. Displace-

ments are left alone or are corrected by hysterectomy. These radical measures would prevent many women in these countries from obtaining the benefits of a carefully performed suspension operation. The most unlikely uteri sometimes became the nidus for a fœtus!

BETHEL SOLOMONS.

GORDON: *Management of Abortion from a Study of 530 Consecutive Cases.* *American Journal*, "Obstetrics and Gynæcology," II., 5, 521.

EVERY month in the literature one finds different opinions as to the management of abortion. Gordon gives the following results from his experience:

1. All cases of abortion threatened inevitable or incomplete should be treated conservatively until it is demonstrated that conservative treatment has failed.
2. Conservative treatment, properly executed, will fail in something less than four cases out of one hundred.
3. The mortality and morbidity in abortion cases is in direct ration with the degree of intrauterine interference. The more the manipulation and interference, the higher the mortality and morbidity.
4. Curettage in abortion transposes many aseptic cases into septic cases.
5. Curettage, therefore, is not only seldom indicated, but is often actually harmful.
6. Conservative treatment has, if possible, a more positive indication in septic than aseptic cases.

BETHEL SOLOMONS.

FORSDIKE: *Carcinoma of the Cervix in a Vagina aged* 24 "Proceedings, Royal Society Medicine," XV., 4, 13.

THIS paper reports a case which had been considered to be merely irregular puberty hæmorrhage. Vaginal examination revealed a large ulcerative cancerous growth which was treated by radium. Remarks are added on the rarity of the condition under the age of 25, and two cases already reported by Cragin and De Rouville are mentioned.

BETHEL SOLOMONS.

TRANSACTIONS.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF SURGERY.

A meeting of this section was held at the Royal College of Surgeons on December 16th, 1921, Mr. R. C. B. Maunsell in the chair.

Mr. Henry Stokes opened a discussion on Blood Transfusion (see page 18).

Dr. G. E. Nesbitt described his experience with the Citrate Method in cases of pernicious anæmia (see page 23).

Sir William Taylor described methods of blood transfusion which he had seen during a recent visit to American clinics, and referred to the presence of calcium in impure sodium chloride as a cause of clotting in citrated blood.

Prof. Scott spoke of the difficulty of obtaining pure sodium chloride.

Mr. R. A. Stoney urged the need for a group of professional blood donors in Dublin.

Mr. W. Pearson showed a simple diagram of the compatibility of each blood group with the other three.

Prof. Adrian Stokes gave a demonstration of a macroscopic method of blood typing.

SECTION OF STATE MEDICINE.

At the opening meeting of this Section on January 13th, 1922, the president, Dr. Hennessy read an address upon the organisation of the medical profession in Ireland (see page 5).

Sir William Wheeler agreed with almost everything which the President had said. He stated that in the past he had attended many meetings of the British Medical Association and the Irish Medical Association, but he had found these meetings very depressing, as at them there was a great deal of talk but very little was accomplished. He pointed out the importance at the present time of the profession making its voice felt. It was a case of "now or never."

Dr. Magennis agreed with the President as to the need for unity in the profession and the necessity for restricting the number of those entering medical schools. In his opinion the statutory body proposed by the President for the control of conduct would be excellent. He referred to the work done by the I.M.A. in obtaining increased salaries for dispensary medical officers.

Dr. Rowlette did not think that Ireland produced too many doctors but that too few of them were used in this country. There was a lack of realisation of the community of medicine in Ireland. Union was essential, both in interests of individual doctors and of the profession as a whole. Without a truly representative body the profession was at the mercy of any minister or government department.

Sir John Moore instanced cases in which necessary reforms were held up by English officials. He would deplore any interference with the

General Medical Council on account of Irish doctors working in England.

Dr. Bewley said that the formation of a medical trade union was impossible because doctors could not strike and could not picket. The great difficulty about the union of the profession was the selfishness of the individual.

Dr. Crofton disagreed with Dr. Bewley, and thought that strikes were, at times, possible and necessary in order to enforce the wishes of the profession.

Mr. McFetridge pointed out that while strikes were scarcely possible, a united body of doctors might refuse to work any Act which they considered unsuitable.

Dr. Webb, Dr. Denham and Dr. Abrahamson having spoken, the President replied and the meeting terminated.

SECTION OF OBSTETRICS AND GYNÆCOLOGY.

The section of Obstetrics and Gynæcology of the Royal Academy of Medicine in Ireland met on Friday, January 20th, 1922, the President (Dr. Bethel Solomons) in the Chair.

Exhibits.

Armlet for Intra Uterine Manipulation.

Dr. T. F. Cunningham showed a new rubber armlet for securing a vaginal approach to the uterine cavity without risk of contamination from the vulva. He described its successful use in a case of retained placenta complicated by a discharging ischiorectal abscess.

Carcinoma in a Multiple Fibroid Uterus.

The patient was 53 years old, had one child 35 years ago, and was passed the menopause two years. Had hæmorrhage for two months and passed a sausage-shaped tumour, whitish in colour and soft, which was thought possibly a sarcomatous mass. On examination the uterus was found about the size of a fist, chiefly composed of multiple fibroids. Total hysterectomy was done. There was no evidence of glandular or parametric involvement. On opening the uterus the cavity was found full of soft, friable growth markedly polypoid. Microscopically this was found to be a cancer of the common malignant papilloma type but not showing outgrowths so much as solid masses. Much of the epithelium was a single layer of columnar cells.

Uterine and Ovarian Tumours.

The patient aged 40, married 12 years, sterile. Admitted with a tumour extending to umbilicus. On examination an impacted tumour found in pelvis, irregular in shape. The menses were regular, somewhat heavy. At operation a tumour of the right ovary found, very friable and adherent to intestines, pelvis walls and retroverted uterus. It

was removed with some difficulty, owing to adhesions, and then the uterus was seen with similar looking growths forming a definite tumour in the fundus. A practically total hysterectomy was done. Pathologically the ovarian tumour was an adenocarcinoma and the uterine tumour was of the same nature. The latter was evidently a secondary growth by extension transperitoneally through adhesions of the ovarian tumour to the retroverted uterus. There were other similar extensions in the pelvic walls and intestine. The patient developed intestinal obstruction on the second day after the bowels had been opened once. No flatus passed. Hiccough developed on third morning, and faecal vomiting. Abdomen opened through scar, and a loop of small intestine found firmly adherent in Douglas's pouch, held by soft lymphy agglutination, very easily separated. Immediately on separation intestinal gurgling occurred, and the bowels moved before leaving the operation table. The case was quite well healed by first intention 17 days after first operation.

Supports of the Uterus.

Dr. L. Cassidy read a paper on the supports of the uterus, illustrated by lantern slides.

A careful consideration of the anatomical facts led to the conclusion that no one single structure could be regarded as of prime importance for retaining the uterus in position. Every structure which connected the uterus to the bony pelvic wall must help to fix the uterus in the pelvis, but it was only by the harmonious working of all the factors concerned that this result was obtained.

The principal difficulties the uterus had to contend with were (1) intra-abdominal pressure, and (2) structural injuries to the supports sustained during child-birth. With reference to the first, it might be said that ordinary intra-abdominal pressure played no part at all in bringing about uterine displacement, it was only increased intra-abdominal pressure acting over a prolonged period that tended to cause this condition. The structural injuries sustained during child-birth comprised not only injuries of the pelvic floor, but also those sustained by the more important fascial structures which were present in the base of the broad ligaments.

Dr. Gibbon Fitzgibbon said he fully agreed with the anatomical account of the pelvic fascia and levator ani which had been illustrated by the excellent slides. It was when the function of the respective parts was considered that opinions differed. He considered the fascia and muscles co-related as in other parts of the body, like the anterior abdominal walls. The fascia could support a large but limited strain for an indefinite period of time. When it was subjected to strain above the normal the muscle came into action and reinforced the fascia. The levator ani muscle had exactly the same origin from the pelvic wall as the fascia, but ran downwards and inwards to be inserted in

the middle line of the perinæum, while the fascia ran inwards nearly horizontally to be inserted into the viscera. There was a considerable space between the fascia and muscle in the middle line. The part of the muscle which sprang from the pubis ran downwards and backwards to encircle the anus, and when the muscle contracted this portion drew the perinæum upwards and forwards, firmly closing the vagina. This was the part commonly damaged in parturition. Prolapse of the uterus did not result from this. The part of the muscle which sprang from the ischial spines and the obturator foramen was the part which reinforced the fascia. At its origin it was in close relation to the bulk of the fascia which was inserted into the vaginal fornices; when it contracted it drew up the posterior perinæum and flattened out across the pelvis, behind and below the rectum and vaginal fornices, thus pressing the parametric tissue upwards under the fascia and giving support. If the fascia was damaged, prolapse would occur at once. If the muscle is damaged or defective, no prolapse would occur until the fascia had been subjected to strain beyond its supporting strength, when it would rupture and give rise to prolapse.

Prof. Evatt said that there was often congenital weakness of the ligaments; there was a tendency to prolapse of the uterus—probably congenital—which was likely due to weakness in the support of the muscles, in much the same way that hernia might be due to a congenital weakness of the walls of the abdomen. He considered that the lower part of the vagina had little support. Mackenrodt's ligaments held up the cervix, while the uterus pushed out the child. If the pelvic floor was destroyed prolapse occurred, but this did not mean that the pelvic floor supported the uterus.

Dr. Kirkpatrick said that the visceral pelvic fascia crossed the pelvis between the various pelvic organs, giving a sheath to each, each sheath getting the name of one of the various ligaments. In many places these consisted of smooth muscle fibres. This fascia must be torn or relaxed in order to allow the fœtus to pass. In reference to Dr. E. H. Tweedy's theory of uterine tendons, he considered that these were homologous with uterine muscle fibre. If the uterus were supported by fibrous tissues alone, how was it that after pregnancy this tissue could still, in many cases, support the uterus?

The President was pleased to hear one who had done much investigation work in the anatomy of the pelvis bear out facts he had observed in clinical practice, namely, that the uterus was not supported by one set of structures alone, but by several—in other words, that the uterus was supported by the cardinal ligaments, with the other ligaments and the pelvic floor as important accessories. He dwelt on the difficulty in determining data as found by the dissector and by the surgeon, and believed that truth could only be elicited by comparing the results obtained by the former with those of the latter.

It was noteworthy that Dr. Cassidy's findings seemed to bear out

the theory of Dr. Tweedy, who held that the ligaments were really the uterine tendons.

DR. CASSIDY replied.

SECTION OF SURGERY.

A meeting of this section was held in the Royal College of Surgeons on February 3rd, 1922, SIR W. I. DE C. WHEELER in the chair.

Stiffness of Metacarpophalangeal Joints.

SIR W. I. DE C. WHEELER showed two cases with stiff metacarpophalangeal joints treated by Verral's Splint. In one case the man was still wearing the splint and extension tapes. In the second, almost complete function was restored.

A Case of Myositis Ossificans.

MR. H. STOKES showed a case of myositis ossificans of the brachialis anticus. The patient had been wounded by a bomb splinter, and afterwards kicked by a horse. Repeated attacks of inflammation occurred leaving much scarring. A piece of bone, 2 in. by $\frac{3}{4}$ in. was removed, but the *x*-ray taken after the excision showed persistance of a dense shadow at the site of operation.

MR. W. PEARSON thought that the kick was responsible for the condition, as myositis ossificans was uncommon after gunshot wounds

Spleen Removed for Hæmolytic Jaundice.

MR. A. BLAYNEY showed a large spleen successfully removed from a case of hæmolytic jaundice of the familial type. The fragility test was positive with saline at 0·6 per cent. dilution, and was unaltered by operation There were notches in the anterior border of the spleen. He would report the progress of this case in full at a later date.

Result of Suture after Complete Division of the Sciatic Nerve.

MR. R A. STONEY reported a case of division of the left sciatic nerve sutured by him $4\frac{1}{2}$ months after a gunshot wound of the buttock received in 1917.

The ends were separated by an interval of over one inch and the lower end carried forward into the muscles. Both ends were freed, freshened and sutured with fine silk. Sensation had completely returned, even for light touch. There was still 1 inch wasting of the thigh, and $1\frac{1}{4}$ inch wasting of the calf. Movements of the knee were full and strong. Planter flexion of ankle and toes was strong, but there was no voluntary power of inversion, eversion, or dorsi-flexion of foot or toes, though the muscles of anterior tibio-fibular and peroneal regions appeared well developed. Patient had given up wearing foot support for the last three years. He was able to walk several miles. Occasionally he

was troubled with blisters on the great toe ; this had been less marked recently. It was not until two years after operation that slight contraction of calf muscles could be felt on attempted movement of ankle.

Mr. M. Dockrell had noticed that in many cases of foot-drop the tibialis anticus had been over-developed in comparison with the extensors of the toes, causing a tendency to inversion of the foot.

Mr. A. Chance asked if this patient took special pains to keep his foot warm : warmth often prevented ulceration in these cases as in infantile paralysis.

Mr. McCullagh found that after sciatic suture recovery was often favourable at first ; then the tendo Achillis shortened, and might require tenotomy.

Mr. Stoney, in reply, said that the patient had worn a splint for a long period after operation, but had then refused to continue its use. This accounted for the laxity of the extensor group. He thought that ulceration of the sole of the foot was due to chilblain, as there was good sensation in this area.

A Year's Work with Radium Emanations.

Mr. W. C. Stevenson reported the results of a year's work with radium emanation with a summary of 160 cases.

Sir W. I. de C. Wheeler, Dr. T. Kirkpatrick and Mr. W. Pearson spoke of the excellent results obtained by Mr. Stevenson in cases they had sent him, and criticised him on the ground that he claimed too little for this mode of treatment

Dr. Kirkpatrick instanced a case of chronic syphilitic enlargement of the tongue with induration which was the cause of great pain. Complete excision was considered : antisyphilitic treatment gave no relief, but the radium treatment almost immediately relieved the pain.

Sir W. I. de C. Wheeler referred to the improvement in inoperable prostatic cases. Inoperable cancer of the rectum, too, sometimes became operable after radium treatment.

Dr. M. Hayes spoke of the danger of producing telangiectasis in effecting depilation by means of radium.

Reconstruction of a Thumb.

Mr. W. Pearson showed a case of a boy where necrosis of the proximal phalanx had left a flail thumb. A piece of a rib was grafted between the metacarpal and the distal phalanx, resulting in a stiff but opposible thumb. The grip was good. Radiograms of the thumb were shown.

Mr. McCullagh had transplanted an index finger to replace a lost thumb. The patient had afterwards complained that though the thumb was movable, it was too weak to allow him to use it for heavy labour, and requested its removal. This operation should be reserved for cases carefully selected in regard to occupation.

SECTION OF OBSTETRICS.

This Section met on Friday, February 24th, the President (Dr. Solomons) in the Chair.

An Internal Pelvimeter.

Dr. R. Tottenham showed an internal pelvimeter.

Sir Wm. Smyly and The President spoke, and Dr. Tottenham replied.

Sir Wm. Smyly read a paper on Modern Medicine in China.

Modern Medicine in China.

Sir Wm. Smyly said that he had gone out to Peking last summer as the guest of the China Medical Board of the Rockefeller Foundation to attend the ceremonies connected with the dedication of the buildings of the Peking Union Medical College, and to take part in the Medical conference which was held there at the same time.

There were in China at the present time two distinct types of medical practitioners: there was the ordinary native Chinese practitioner who because there are no medical schools, no native literature worthy of the name, and no government supervision, have no scientific knowledge whatever; anyone could call himself a medical man, and anything he had learned or thought he had learned by experience he carefully kept as his own or his familiar secret. There was no professional *esprit de corps*. The other type was represented by a small body of men, mostly foreigners or the pupils of foreigners who had been educated in a similar manner to the medical practitioners in Europe and America.

European medicine was first introduced into China nearly a century ago by Dr. College, a surgeon in the service of the East India Company who started the first hospital in China in Macao, and a few years after, in 1834, having been moved to Canton, he was joined by Dr. Parker, an American missionary, and together they founded a hospital in that city, a happy inauguration of the professional co-operation of European and American medical men which had done so much since that time to establish a medical profession in China and to relieve the sufferings of its people.

Dr. Benjamin Hobson was the first to perceive that the only way to reach the suffering multitudes was by educating native physicians, and to that end he published numerous medical and scientific works in Chinese.

Women physicians arrived in 1873 and had proved of immense service to the women of China, not only medically but socially in assisting to emancipate them from the condition of thraldom in which most of them still lived. In the Union Medical College in Peking, for example, native women were now studying medicine, a thing which would have been considered impossible a few years ago.

Realising the fact first grasped by Dr. Hobson that the suffering multitudes amongst the 400,000,000 of the Chinese population could only be reached by educating natives and establishing a medical profession in China, medical schools have been founded in various places. Sir. Wm. Smyly had visited three of them, namely, the Union Medical Colleges in Moukden, in Toi Men Tou and Peking. They were all efficient and the instruction quite up to the European standard. In the two first it was in Chinese, in the last in English. In favour of the former it had been urged that as it was intended in all the schools gradually to replace the foreign by native teachers, it could be more easily accomplished where the instruction was imparted in the native tongue. But on the other hand it had been found that the work of translating medical works into literary Chinese, which was quite a different language to the vernacular, was so slow, that by the time a book was published it was already some editions out of date. It had, therefore, been determined that in Peking the teaching shall be done in English.

The Union Medical College in Peking was started in 1906 by the united efforts of six missionary societies, four British and two American. In 1915 the Chinese Medical Board of the Rockefeller Foundation took over the entire responsibility of the maintenance of the College and built a new college and hospital on a neighbouring estate, known as the Yii Wang Fu, and converted the old buildings into a pre-medical school. The number of students admitted to the pre-medical school was limited to 35, and as the candidates seeking admission always exceeded that number they had to submit to a competitive examination. To qualify for entrance to that examination the candidates must have passed through a middle school course, including English, Chinese literature, algebra, geometry and drawing, and it is essential that they could read, write, and speak English. The student remained for three years in the pre-medical school where most importance is attached to English and Chinese literature, but he was also taught enough French or German to read intelligently medical works in one or other of those languages, and further he was instructed in physics, chemistry, and biology. Having completed his course in the pre-medical school he was admitted to the medical school where he passed through the usual five years curriculum.

Sir Wm. Smyly said that the new buildings formed together the most beautiful group of palaces that he had ever seen. The white marble courts and staircases, the green enamelled and highly-ornamented tiled roofs, and the woodwork artistically painted in all the colours of the rainbow, were resplendent in the clear atmosphere and bright sunshine of Peking. It would occupy too much time to describe in detail all the departments of this wonderful institution where are to be found all the latest aids to medical work which the ingenuity of man has discovered, the total cost of which has been five thousand million

American dollars, or a million and a-half of our money.

The College staff consisted of professors, associate professors and visiting staff :

American and European	65
Chinese	21
Pre-Medical School :	
American and European	11
Chinese	5
Administrative :	
American and European	44
Chinese	60
Total	206

The nursing staff was ample and efficient, the more important positions being held by thoroughly trained and highly educated American ladies, most of them University graduates.

The qualifications required for entrance to the training school for nurses were the same as for entrance to the pre-medical school, and the period of instruction was four years.

Lastly the speaker said that the Chinese medical men who had been trained and educated in modern scientific medicine had for the first time in the history of China developed professional *esprit de corps* and have formed a National Medical Association of China, of which Dr. Du Lien Teh is the president.

THE PRESIDENT remarked that the Dublin School was lucky in that it was represented in China by such a distinguished obstetrician as Sir. Wm. Smyly. He asked what nursing home faculties were found in North China for Englishwomen who found it necessary to remain for operations or accouchements. He was interested to hear of the educated class of woman who pursued nursing as a career and asked whether the technique in theatre and other nursing was better in consequence. Although it was stated that eight years was the period necessary for study by the Chinese medical student, he did not believe that the student in these islands required such an extended course of study, although the present course might be prolonged with advantage.

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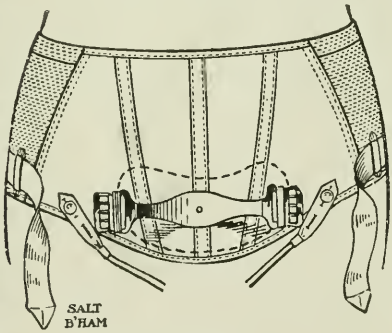

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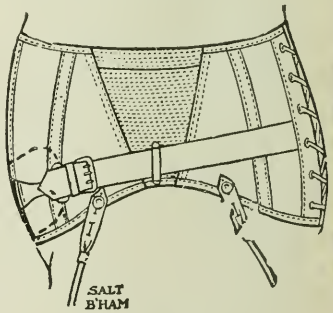

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